EXHIBIT A

Patent and Trac ---- k Office

ASSISTANT SECRE AND COLOR PATENTS AND 1 ADEMARKS Washington, D.C. 201.31 AND COMMISSIONER

TD: JAMES E. EAKIN HARRISON & EAKIN 1700 SOUTH EL CAMINO REAL, STE 405 SAN MATEO, CA 94402-3083

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DEC 1 1 1989

UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS - AVAILABLE AT THE U.S. PATENT AND TRADEMARK OFFICE ON THE REEL AND FRAME NUMBER REFERENCED BELOW. A DIGEST OF THE DOCUMENT HAS ALSO BEEN MADE AND APPEARS IN THE OFFICE'S RECORDS AS SHOWN:

ASSIGNOR: 001 BONEAU, MICHAEL D.

DOC DATE: 08/24/89

REEL/FRAME 5116/0570 RECORDATION DATE: 08/24/89 NUMBER OF PAGES 002

DIGEST: ASSIGNMENT OF ASSIGNORS INTEREST

ASSIGNEE: 501 ACCUTERIX, INC., 342 W. SUNNYOAKS, CAMPBELL, CALIFORNIA 9 5008, A CORP. OF CA

7-398180 SERIAL NUMBER

FILING DATE 08/24/89 00/00/00

ISSUE DATE

TITLE OF INVENTION: ENDOVASCULAR SUPPORT DEVICE AND METHOD

INVENTOR: OOI BONEAU, MICHAEL D.

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<u>ASSIGNMENT</u>

WHEREAS, I, MICHAEL D. BONEAU, a citizen of the United States of America, residing at 342 W. Sunnyoaks, Campbell, California 95008, have invented a certain new and useful ENDOVASCULAR SUPPORT DEVICE AND METHOD for which I am about to make an application for Letters Patent of even date herewith; and

WHEREAS, ACCUTERIX, INC., a corporation existing under the laws of the State of California and doing business at 342 W. Sunnyoaks, Campbell, California 95008, is desirous of obtaining the entire right, title and interest in, to and under the said invention and application.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, i, MICHAEL D. BONEAU, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over unto the said ACCUTERIX, INC, its successors, legal representatives and assigns, my entire right, title and interest in, to and under the said invention and the said application for Letters Patent, a copy of which as filed in the United States Patent Office is contained in Docket No. H-1136-P in the offices of HARRISON & EAKIN, a Partnership of Professional Corporations, 1700 South El Camino Real, Suite 405, San Mateo, California 94402-3083 and all divisions, continuations and continuations-inpart thereof, and all Letters Patent of the United States which may be granted thereon and all applications for Letters Patent which may be filed for said invention in any country or countries foreign to the United States, and all Letters Patent which may be granted for said invention in any country or countries foreign to the United States, and to all extensions, renewals, and reissues thereof, and the right to claim priority under the International Convention for the Protection of Industrial Property; and I hereby authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States whose duty it is to issues patents on applications as aforesaid, to issue all Letters Patent for said invention to the said ACCUTERIX, INC., its successors, legal representatives and assigns, in accordance with this instrument.

AND I hereby covenant that I have the full right to convey my entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I hereby further covenant and agree that I will communicate to the said ACCUTERIX, INC., its successors, legal representatives and assigns, any facts known by me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing or reissue applications, make all rightful oaths, and generally do everything possible to aid the said ACCUTERIX, INC., its successors, legal representatives and assigns to obtain and enforce proper patent protection for said invention in all countries.

IN TESTIMONY WHEREOF, I have hereunto set my hand this Twenty-Fourth day of August, 1989, at _______. California.

Michael D. Boneau

STATE OF CALIFORNIA

COUNTY OF Santa Clara

SS.

On this Twenty-Fourth day of August, 1989, before me personally appeared Michael D. Boneau, personally known to me or proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument, and acknowledged that he executed it. Witness my hand and official seal.



Jennifer & Hawkins Notary Public

RECORDED PATENT & TRADEMARK OFFICE

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COMMISSIONER OF PATENTS AND TRADEMARKS SELICE



UNITED STATES DEPARTMENT OF COMMERCE

Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

DATE: 09/18/91 TO: JAMES E. EAKIN HARRISON & EAKIN 1700 SOUTH EL CAMINO REAL, STE 405 SAN MATEO, CA 94402-3083

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ASSIGNOR:

DOC DATE: 08/09/91

ACCUTERIX, INC., A CORPORATION OF CA

REEL/FRAME 5816/0215 RECORDATION DATE: 08/23/91 NUMBER OF PAGES 003

DIGEST : ASSIGNMENT OF ASSIGNORS INTEREST

ASSIGNEE:

ENDOVASCULAR SUPPORT SYSTEMS, INC. A CORPORATION OF CA 342 W. SUNNYOAKS CAMPBELL, CALIFORNIA 95008

FILING DATE 08/24/89 SERIAL NUMBER 7-398180 00/00/00 ISSUE DATE PATENT PATENT

> RECEIVED JAMES E. EAKIN, R.C.

> > OCT 1 5 1991

£Ę	JKC
	DOCKET

it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention the said ENDOVASCULAR SUPPORT SYSTEMS, INC., its successors, legal

my entire interest herein assigned, and that I have not executed, and will not execute,

communicate to the said ENDOVASCULAR SUPPORT SYSTEMS, INC., its successors,

legal representatives and assigns, any facts known to it respecting said invention and

AND, ACCUTERIX, INC., hereby covenant that it have the full right to convey

AND, ACCUTERIX, INC., hereby further covenant and agree that it will

representatives and assigns, in accordance with this instrument;

any agreement in conflict therewith;

OFFICIAL SEAL GAIL J STRACK Notary Public-Collorate SAN FRANCISCO COUNTY My Commission Expica August 26, 1992 2

On 9th day of angust, 1991 before me, Harl Sheek personally appeared Ben Hidalgo, personally known to me (or proved to me on the basis of

satisfactory evidence) to be the person whose name is subscribed to the within

instrument and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon

behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

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ASSIGNMENT

WHEREAS, ACCUTERIX, INC., a corporation existing under the law of the State of California and doing business at 342 W. Sunnyoaks, Campbell, California 95008, is the owner by assignment of U.S. Patent Application Serial Number 07/398,180, filed August 24, 1989, entitled ENDOVASCULAR SUPPORT DEVICE AND METHOD together with all right, title and interest in, to and under the invention described therein including all foreign rights thereto; and

WHEREAS, ENDOVASCULAR SUPPORT SYSTEMS, INC., a corporation existing under the laws of the State of California and doing business at 342 W. Sunnyoaks, Campbell, California 95008, is desirous of obtaining the entire right, title and interest in, to and under the said application, including all foreign rights;

NOW, THEREFORE, in consideration of a good and valuable consideration, the receipt of which is hereby acknowledged, ACCUTERIX, INC., have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over unto the said ENDOVASCULAR SUPPORT SYSTEMS, INC., its successors, legal representatives and assigns my entire right, title and interest in, to and under the said invention and the said application of Letters Patent Serial No. 07/398,180 filed August 24, 1989, and all divisions, continuations and continuations-in-part thereof, and all Letters Patent of the United States which may be granted thereon and all application for Letters Patent which may be granted for said invention in any country or countries foreign to the United States of America, and to all extensions, renewal, reissues, and reexamination certificates thereof, and the right to claim priority under the International Convention of the Protection of Industrial Property, and all rights under the Patent Cooperation Treaty; and ACCUTERIX, INC., hereby authorize and request the Commissioner of Patents and Trademarks of the United States of America, and any official of any country or countries foreign to the United States whose duty

ASSIGNMENT

WHEREAS, ENDOVASCULAR SUPPORT SYSTEMS, INC., formerly named ENDOTHELIAL SUPPORT SYSTEMS, INC., a corporation existing under the laws of the State of California and doing business at 342 W. Sunnyoaks, Campbell, California 95008, is the owner by assignment of U.S. Patent Application Serial Number 07/398,180, filed August 24, 1989, entitled ENDOVASCULAR SUPPORT DEVICE AND METHOD, together with all right, title and interest in, to and under the invention described therein including all foreign rights thereto; and

WHEREAS, APPLIED VASCULAR ENGINEERING, INC., a corporation existing under the laws of the State of Delaware and doing business at 5345 Skylane Boulevard, Santa Rosa, CA 95403 is desirous of obtaining the entire right, title and interest in, to and under the said invention and application, including all foreign rights;

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, ENDOVASCULAR SUPPORT SYSTEMS, INC., have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over unto the said APPLIED VASCULAR ENGINEERING, INC., its successors, legal representatives and assigns, its entire right, title and interest in, to and under the said invention and the said application for Letters Patent serial number 07/398,180, filed August 24, 1989, and all divisions, continuations and continuations-in-part thereof, and all Letters Patent of the United States which may be granted thereon and all applications for Letters Patent which may be filed for said invention in any country or countries foreign to the United States, and all Letters Patent which may be granted for said invention in any country or countries foreign to the United States, and to all extensions, renewals, and reissues thereof, and the right to claim priority

H-1136-P

under the International Convention for the Protection of Industrial Property; and ENDOVASCULAR SUPPORT SYSTEMS, INC., hereby authorizes and requests the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States whose duty it is to issues patents on applications as aforesaid, to issue all Letters Patent for said invention to the said APPLIED VASCULAR ENGINEERING, INC., its successors, legal representatives and assigns, in accordance with this instrument.

AND ENDOVASCULAR SUPPORT SYSTEMS, INC., hereby covenants that it has the full right to convey its entire interest herein assigned, and that it has not executed, and will not execute, any agreement in conflict herewith.

AND ENDOVASCULAR SUPPORT SYSTEMS, INC., hereby further covenants and agrees that it will communicate to the said APPLIED VASCULAR ENGINEERING, INC., its successors, legal representatives and assigns, any facts known by it respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing or reissue applications, make all rightful oaths, and generally do everything possible to aid the said APPLIED VASCULAR ENGINEERING, INC., its successors, legal representatives and assigns to obtain and enforce proper patent protection for said invention in all countries.

IN TESTIMONY WHEREOF, ENDOVASCULAR SUPPORT SYSTEMS, INC., through an authorized officer, has caused this Assignment to be executed this Eighth day of September, 1993, at Santa Rosa, California.

Bradly A. Jendersee, President

ENDOVASCULAR SUPPORT SYSTEMS, INC.

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To the Hon. Commissioner of Patents & Trademarks; Please record the attached original documents. 1. Name of conveying party(ies): 2. Name and address of receiving party(les):			
ENDOVASCULĀR ŠUPPORT SYSTEMS, INC.	Name: APPLIED VASCULAR ENGINEERING, INC.		
	Street Address: 5345 SKYLANE BLVD.		
/- Additional name(s) of conveying party(ins) Inched?Yes_X_No	City: SANTA ROSA State: CA Zip: 95403		
3. Nature of Conveyance:			
XX Assignment Merrer Change of Name			
Other Execution Date:	Additional name(s) & addresses.attached?Yes_XX_No		
If this document is being filed together we the application is: A. Patent Application No.(s)			
If this document is being filed together we the application is: A. Patent Application No.(s)	with a new application, the execution date of B. Patent No.(8)		
If this document is being filed together we the application is: A. Patent Application No.(s) 07/398,180 Additional numbers attached? Yes	B. Patent No.(s)		
If this document is being filed together we the application is: A. Patent Application No.(s) 07/398,180 Additional numbers attached? Yes Name and address of party to whom correspondences	B. Patent No.(s) B. Total number of applications and patents involved 1		
If this document is being filed together we the application is: A. Patent Application No.(s) 07/398,180 Additional numbers attached? Ye 5. Name and address of party to whom correspondence to the concerning document should be mailed	B. Patent No.(s) B. Patent No.(s) B. Total number of applications and patents involved 7. Total fee(37CFR3.41)\$ 40.00 XX Enclosed Authorized to be charged to		
If this document is being filed together we the application is: A. Patent Application No.(s) 07/398,180 Additional numbers attached? Yes 5. Name and address of party to whom correspond concerning document should be mailed Name: LAW OFFICES OF JAMES E. EAKIN	B. Patent No.(s) B. Patent No.(s) B. Total number of applications and patents involved_1 7. Total fee(37CFR3.41)\$ 40.00 XX Enclosed Authorized to be charged to deposit account.		
If this document is being filed together we the application is: A. Patent Application No.(s) O7/398,180 Additional numbers attached? Yes Name and address of party to whom correspondence of concerning document should be mailed Name: LAW OFFICES OF JAMES E. EAKIN Street Address: 1301 SHOREWAY RD., STE. 37 City: BELMONT State: CA Zip: 94002	B. Patent No.(s) And I applications And Patents involved 1 At Enclosed Authorized to be charged to deposit account. Number 05-0150 (Attach duplicate copy of this page if paying by Deposit Account) B. Foregoing information is true and correct and		
If this document is being filed together we application is: A. Patent Application No.(s) 07/398,180 Additional numbers attached?Ye 5. Name and address of party to whom correspondencerning document should be mailed Name: LAW OFFICES OF JAMES E. EAKIN Street Address:1301 SHOREWAY RD., STE. 37 City: BELMONT State: _CAZip: 94002 9. Statement and signature.	B. Patent No.(s) And I applications And Patents involved 1 At Enclosed Authorized to be charged to deposit account. Number 05-0150 (Attach duplicate copy of this page if paying by Deposit Account) B. Foregoing information is true and correct and		



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

JULY 01, 1997

ARTERIAL VASCULAR ENGINEERING RICHARD L. KLEIN 3576 UNOCAL PLACE SANTA ROSA, CA 95403



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IS NOTICE. THE INFORMATION THE DATA PRESENT IN THE OU SHOULD FIND ANY ERRORS OR ! CONTACT THE EMPLOYEE WHOSE PLEASE SEND REQUEST FOR CE, ASSIGNMENT DIVISION, 0C35, WASHINGTON, D.C. 20231.

RECORDATION DATE: 05/19/1

NEEL/FRAME: 8522/0049 NUMBER OF PAGES: 6

BRIEF: CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

APPLIED VASCULAR ENGINEERING, INC. DOC DATE: 01/29/1996

ASSIGNEE:

ARTERIAL VASCULAR ENGINEERING, INC. 3576 UNOCAL PLACE SANTA ROSA, CALIFORNIA 95403

SERIAL NUMBER: 08619014

PATENT NUMBER:

FILING DATE: 03/20/1996

ISSUE DATE:

MAYA BENNETT, EXAMINER ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF

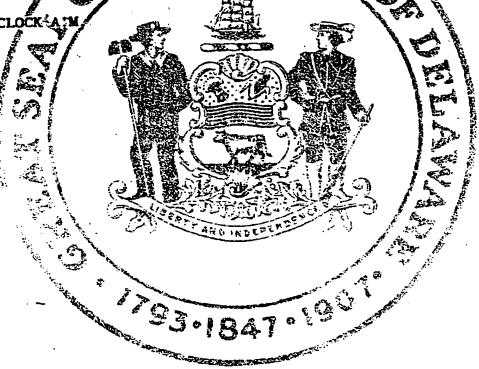
DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT

COPY OF THE RESTATED CERTIFICATE OF APPLIED VASCULAR

ENGINEERING, INC. "CHANGING ITS NAME FROM "APPLIED VASCULAR

ENGINEERING, INC. "TO ARTERIAL VASCULAR ENGINEERING, INC.",

FILED IN THIS OFFICE ON THE THIRTIETH DAY OF JANUARY, A.D. 1996





Edward J. Freel, Secretary of State

AUTHENTICATION:

7851810

DATE:

03-04-96

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AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

I.

The name of this corporation is Arterial Vascular Engineering, Inc.

II.

The address of the registered office of the corporation in the State of Delaware is 1013 Centre Road, City of Wilmington. County of New Castle, and the name of the registered agent of the corporation in the State of Delaware at such address is The Prentice-Hall Corporation System, Inc.

III.

The purpose of this corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of the State of Delaware.

IV.

- A. This corporation is authorized to issue two classes of stock to be designated, respectively, "Common Stock" and "Preferred Stock." The total number of shares which the corporation is authorized to issue is Fifty Million Five Hundred Thousand (50,500,000) shares. Fifty Million (50,000,000) shares shall be Common Stock, each having a par value of one-tenth of one cent (\$.001). Five Hundred Thousand (500,000) shares shall be Preferred Stock, each having a par value of one-tenth of one cent (\$.001). Each outstanding share of Common Stock, par value \$.01, shall, upon filing of this Amended and Restated Certificate of Incorporation be reconstituted as 5.5 shares of Common Stock, par value \$.001. No fractional shares will be issued and, in lieu thereof, any holder of less than one share of Common Stock shall be entitled to receive cash for such holder's fractional share based on the fair market value of such stock as determined by the Company's Board of Directors.
- B. The Preferred Stock may be issued from time to time in one or more series. The Board of Directors is hereby authorized, by filing a certificate (a "Preferred Stock Designation") pursuant to the Delaware General Corporation Law, to fix or alter from time to time the designation, powers, preferences and rights of the shares of each such series and the qualifications, limitations or restrictions of any wholly unissued series of Preferred Stock, and to establish from time to time the number of shares constituting any such series or any of them; and to increase or decrease the number of shares of any series subsequent to the issuance of shares of that series, but not below the number of shares of such series then outstanding. In case the number of shares of any series shall be decreased in accordance with the foregoing sentence, the shares constituting such decrease shall resume the status that they had prior to the adoption of the resolution originally fixing the number of shares of such series.

For the management of the business and for the conduct of the affairs of the corporation, and in further definition, limitation and regulation of the powers of the corporation, of its directors and of its stockholders or any class thereof, as the case may be, it is further provided that:

A.

- (1) The management of the business and the conduct of the affairs of the corporation shall be vested in its Board of Directors. The number of directors which shall constitute the whole Board of Directors shall be fixed exclusively by one or more resolutions adopted by the Board of Directors.
- (2) Notwithstanding the foregoing provisions of this Article, each director shall serve until his successor is duly elected and qualified or until his death, resignation or removal. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

Subject to the rights of the holders of any series of Preferred Stock to elect additional directors under specified circumstances, directors shall be elected at each annual meeting of stockholders. Each director shall serve until his successor is duly elected and qualified or until his death, resignation or removal. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

registration statement under the Securities Act of 1933, as amended, covering the offer and sale of the corporation's Common Stock to the public (the "Initial Public Offering"), and subject to the rights of the holders of any series of Preferred Stock, any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or other causes and any newly created directorships resulting from any increase in the number of directors, shall, unless the Board of Directors determines by resolution that any such vacancies or newly created directorships shall be filled by the stockholders and except as otherwise provided by law, be filled only by the affirmative vote of a majority of the directors then in office, even though less than a quorum of the Board of Directors, and not by the stockholders. Any director elected in accordance with the preceding sentence shall hold office for the remainder of the full term of the director for which the vacancy was created or occurred and until such director's successor shall have been elected and qualified.

B.

(1) Subject to paragraph (h) of Section 43 of the Bylaws, the Bylaws may be altered or amended or new Bylaws adopted by the affirmative vote of at least eighty percent (80%) of the voting power of all of the then-outstanding shares of the Voting Stock. The Board of Directors shall also have the power to adopt, amend, or repeal Bylaws.

- (2) The directors of the corporation need not be elected by written ballot, unless the Bylaws so provide.
- (3) Following the Initial Public Offering, no action shall be taken by the stockholders of the corporation except at an annual or special meeting of stockholders called in accordance with the Bylaws.
- (4) Special meetings of the stockholders of the corporation may be called, for any purpose or purposes, by (i) the Chairman of the Board of Directors, (ii) the Chief Executive Officer, or (iii) the Board of Directors pursuant to a resolution adopted by a majority of the total number of authorized directors (whether or not there exist any vacancies in previously authorized directorships at the time any such resolution is presented to the Board of Directors for adoption), and shall be held at such place, on such date, and at such time as the Board of Directors shall fix.
- (5) Advance notice of stockholder nominations for the election of directors and of business to be brought by stockholders before any meeting of the stockholders of the corporation shall be given in the manner provided in the Bylaws of the corporation.

VI.

- A. A director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware General Corporation Law, or (iv) for any transaction from which the director derived an improper personal benefit. If the Delaware General Corporation Law is amended after approval by the stockholders of this Article to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director shall be eliminated or limited to the fullest extent permitted by the Delaware General corporation Law, as so amended.
- B. Any repeal or modification of this Article VI shall be prospective and shall not affect the rights under this Article VI in effect at the time of the alleged occurrence of any act or omission to act giving rise to liability or indemnification.

VII.

A. The corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, except as provided in paragraph B. of this Article VII, and all rights conferred upon the stockholders herein are granted subject to this reservation.

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF APPLIED VASCULAR ENGINEERING, INC.

APPLIED VASCULAR ENGINEERING, INC., a corporation organized and existing under the General Corporation Law of the State of Delaware, does hereby certify as follows:

FIRST: The name of the corporation is APPLIED VASCULAR ENGINEERING, INC.

SECOND: The Certificate of Incorporation of the corporation was filed by the Secretary of State on July 30, 1991, under the name of Applied Vascular Engineering, Inc.

THIRD: The Amended and Restated Certificate of Incorporation of the corporation, in the form attached hereto as Exhibit A, has been duly adopted in accordance with the provisions of Sections 242 and 245 of the General Corporation Law of the State of Delaware by the Board of Directors of the corporation.

FOURTH: The Amended and Restated Certificate of Incorporation of the corporation, in the form attached hereto as Exhibit A, was approved by the written consent of a majority of the outstanding capital stock of the corporation in accordance with the provisions of Sections 242 and 245 of the General Corporation Law of the State of Delaware. Written consent has been provided, and written notice has been given, in accordance with Section 228 of the General Corporation Law of the State of Delaware. The corporation has one class of stock outstanding. The total number of outstanding shares of Common Stock of the corporation is four million eight hundred sixteen thousand nine hundred fifty-eight (4,816,958).

FIFTH: The Amended and Restated Certificate of Incorporation so adopted reads in full as set forth in Exhibit A attached hereto and hereby incorporated by reference.

IN WITNESS WHEREOF, APPLIED VASCULAR ENGINEERING, INC. has caused this Restated Certificate of Incorporation to be signed by its President and attested to by its Secretary this 29 day of January 1996.

APPLIED VASCULAR ENGINEERING, INC.

By:

Bradly A. Jendersee

Chief Executive Officer and President

ATTEST:

John D) Miller

Secretary

STATE OF DELAWARE SECRETARY OF STATE DIVISION OF CORPORATIONS FILED 09:00 AM 01/30/1996 960028170 - 2269660



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

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RECORDATION DATE: 03/25/1996

1251 AVENUE OF THE AMERICAS

NEW YORK, NEW YORK 19020

REEL/FRAME: 7863/0672 NUMBER OF PAGES: 6

BRIEF: CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

JUNE 20, 1996

FISH & NEAVE NICOLA A. PISANO

APPLIED VASCULAR ENGINEERING, INC.

DOC DATE: 01/29/1996

ASSIGNEE:

ARTERIAL VASCULAR ENGINEERING, INC.

3624 WESTWIND BOULEVARD

SANTA ROSA, CALIFORNIA 95403

SERIAL NUMBER: 08172420

PATENT NUMBER:

FILING DATE: 12/22/1993

FILING DATE: 06/06/1995

ISSUE DATE:

ISSUE DATE:

SERIAL NUMBER: 08471738

PATENT NUMBER: 5,891,190

SERIAL NUMBER: 08465842

PATENT NUMBER: 5,800,509

SERIAL NUMBER: 08326023

PATENT NUMBER:

FILING DATE: 06/06/1995

ISSUE DATE: 9/1/98

FILING DATE: 10/19/1994

ISSUE DATE:

7863/0672 PAGE 2

SERIAL NUMBER: 08478192

PATENT NUMBER:

SERIAL NUMBER: 08451270

PATENT NUMBER:

SERIAL NUMBER: 08326031

PATENT NUMBER:

SERIAL NUMBER: 08562138

PATENT NUMBER:

SERIAL NUMBER: 08568543

PATENT NIMBER:

SERIAL NUMBER: 08568834

PATENT NUMBER:

SERIAL NUMBER: 07398180

PATENT NUMBER: 5292331

FILING DATE: 06/07/1995

ISSUE DATE:

FILING DATE: 05/30/1995

ISSUE DATE:

FILING DATE: 10/19/1994

ISSUE DATE:

FILING DATE: 11/22/1995

ISSUE DATE:

FILING DATE: 12/07/1995

ISSUE DATE:

FILING DATE: 12/07/1995

ISSUE DATE:

FILING DATE: 08/24/1989

ISSUE DATE: 03/08/1994

JERYL MCDOWELL, EXAMINER ASSIGNMENT DIVISION

OFFICE OF PUBLIC RECORDS

FORM PTO-1595 FORM 9TO-1595 FORM 9 TO-1595	3-1996 U.S. DEPARTMENT OF COMMERC
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2/23 (A)	
To the Honorable Commissioner of Patents and 1991	166193 ed original documents or copy thereof.
MAR 25 1998	2. Name and address of receiving party(les)
LHECEIPT ACCOMM	Name: Arterial Vascular Engineering,
Applied Vascular Engineering, Ind Dry	Inc.
Additional name(s) of conveying party(les) attached? O Yes III No	Hitelika Accion
3. Nature of conveyance:	
☐ Assignment ☐ Merger	Street Address: 3621 Westwind Boulevard
☐ Security Agreement ☐ Change of Name	
	City: Santa Rosa State: CA ZIP: 9540
Other	
Execution Date: January 29, 1996	Additional name(s) & address(es) attached? C Yes 🛱 No
Application number(s) or patent number(s): If this document is being filed together with a new application.	
A. Patent Application No.(s) 08/172,420; 08/471,738; 08/465,842; 08/326,023; 08/478,192; 08/451,270; 08/326,031; 08/562,138; 08/568,543;	B. Patent No.(s) 5,292,331 attached? D Yes Q No
08/568,834 Additions a Addition is a	
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
Name: Nicola A. Pisano	7. Total fee (37 CFR 3.41)\$ 440.00
Internal Address: c/o FISH & NEAVE	☑ Enclosed
	☐ Authorized to be charged to deposit account
Street Address: 1251 Avenue of the	8. Deposit account number:
Americas	06-1075
City: New York State: NY ZIP: 10020	(Attach duplicate copy of this page if paying by deposit account)
	ISE THIS SPACE 581 440.00 CK
9. Statement and signature. To the best of my knowledge and belief, the foregoing infor the original document. Nicola A. Pisano	mation is true and correct and any attached copy is a true copy of 3-16-92.
Name of Person Signing	Signature ng cover sheet, attachments, and document: 6
Total number of pages including	ig cover screen, and an economical

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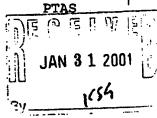
2. Name and address of receiving party(ies)
Name: Arterial Vascular Engineering Inc
Street Address: 3621 Westwind Boulevard City: Santa Rosa State: CA ZIP: 9540 Additional name(s) & address(es) attached? □ Yes 🖫 No
B. Patent No.(s) 5,292,331 Stached? © Yes & No.
6. Total number of applications and patents involved: 11 7. Total fee (37 CFR 3.41)
8. Deposit account number:
mation is true and correct and any attached copy is a true copy of the first and any attached copy is a true copy of the first and any attached copy is a true copy of the first and the



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office ASSISTANT SECRETARY AND COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

JANUARY 24, 2001

MEDTRONIC AVE INC. CATHERINE C. MARESH IP LEGAL 3576 UNOCAL PLACE SANTA ROSA, CA 95403





UNITED STATES PATENT AND TRADEMARK OFFICE NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 11/14/2000

REEL/FRAME: 011258/0053

NUMBER OF PAGES: 6

BRIEF: CHANGE OF NAME (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

- INC.

PATENT NUMBER:

ARTERIAL VASCULAR ENGINEERING,

DOC DATE: 01/28/1999

ASSIGNEE:

State of the state

MEDTRONIC AVE, INC. 3576 UNICAL PLACE

SANTA ROSA, CALIFORNIA 94928

FILING DATE: 04/05/1999

ISSUE DATE:

CPI 1684

DOCKETED

RED BOOK

2nd Review

SEDLEY PYNE, PARALEGAL ASSIGNMENT DIVISION OFFICE OF PUBLIC RECORDS

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SERIAL NUMBER: 09/287216

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FORM PTO-1595
(Rev. 6-93)

11-24-2000

locket No. P106 DIV 3 C

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FORM PTO-1595 (Rev. 6-93)	101526093	and Trademark Office		
To the Honorable Asst. Commissioner for Patents. Please record the attached original documents or copy thereof.				
1. Name of Conveying Party(ies):	2. Name and address of reco			
Arterial Vascular Engineering, Inc.	Name: MEDTRONIC	C AVE, INC.		
Additional name(s) of conveying parties attached? ☐ Yes ☐ No	internal Address:			
	Street Address: 3576	Unocal Place		
3. Nature of convenyance:	City: Santa Rosa	State: CA ZIP: 94928		
Assignment D Merger D Security Agreement X Change of N	ame	d addresses attached?		
© Other: Execution Date: January 28, 1999	☐ Yes	□ No		
 Application Number(s) or Patent Number(s): U.S. Application Serial No. 09/287,216 If this document is being filed together with a new application, the execution date of the application is: 				
Day of Streets Nafel	B. Patent No(s):			
A. Patent Application (10(s): Additional numbers attached? Yes 1	√o			
5. Names and address of party to whom corresponden		ions and patents involved: 1		
concerning document should be mailed:	7. Total fee (37 CFR 3.41):	\$40.00		
Name: IP Legal Medtronic AVE Inc.		harge Fees to Deposit Account		
3576 Unocal Place	BCharge any additional	fees associated with this paper		
Santa Rosa, CA. 95403	or during the penden any overpayment, to	ev of this application, of credit		
(707) 541-3155 ·	8. Deposit account number	: 01-2525		
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 Statement and signature: To the best of my knowledge and belief, the foregoing is true and correct and any attached copy is a true of copy of the original document. 				
Catherine C Maresh Works & 2000				
Catherine C. Maresh Name of Person Signing Signature Date				
Att Reg. No 35,268 Total number of pages including cover sheet, attachments and document 5				
10. Change Correspondence Address to that of Part 5? ✓ Yes □ No				
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Docket No. P106 DIV 3 C

FOPM PTO-1595 7-24-700 101	2444379 Department of Commerce .t and Trademark Office
To the Honorable Asst. Commissioner for Patents. Please record the	e attached original documents or copy thereof.
1. Name of Conveying Party(ies): Arterial Vascular Engineering, Inc. Additional name(s) of conveying parties attached? □ Yes □ No	2. Name and address of receiving party (ies): Name: MEDTRONIC AVE, INC. Internal Address:
3. Nature of conveayance: Assignment	Street Address: 3576 Unocal Place City: Santa Rosa State: CA ZIP: 94928 Additional names and addresses attached?
4. Application Number(s) or Patent Number(s): U.S. Application Serial No: 09/287,216 If this document is being filed together with a new application, the A. Patent Application No(s):	e execution date of the application is: B. Patent No(s):
Additional numbers attached?	6. Total number of applications and patents involved:
Name: IP Legal Medtronic AVE Inc. 3576 Unocal Place Santa Rosa, CA. 95403 (707) 541-3155	7. Total fee (37 CFR 3.41): \$40.00 □ Enclosed ®Charge Fees to Deposit Account ®Charge any additional fees associated with this paper or during the pendency of this application, or credit any overpayment, to deposit account. 8. Deposit account number: 01-2525
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Catherine C. Maresh Name of Person Signing Signature	Arterest 7/21/00 Date
Att Reg. No 35,268 Total number of pa	ages including cover sheet, attachments and document5
10. Change Correspondence Address to that of Part 5? Some No. 0651-0011 (exp. 4/94)	'es □ No
Box; A	issioner for Patents ussignments on, D.C. 2023 1

State of Delaware

PAGE 1

Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF
DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT
COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"MAV MERGER CORP.", A DELAWARE CORPORATION,

WITH AND INTO "ARTERIAL VASCULAR ENGINEERING, INC." UNDER THE NAME OF "MEDTRONIC AVE, INC.", A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE TWENTY-EIGHTE DAY OF JANUARY, A.D. 1999, AT 3 O'CLOCK P.M.

100k

AUTHENTICATION:

DATE:

Freel, Secretary of State

05-20-99

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2269660 8100M



CERTIFICATE OF MERGER OF MAY MERGER CORP. INTO

ARTERIAL VASCULAR ENGINEERING, INC.

The undersigned corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware,

DOES HEREBY CERTIFY:

FIRST, That the name and state of incorporation of each of the constituent corporations of the merger is as follows:

Name

State of Incorporation

Arterial Vascular Engineering, Inc. MAV Merger Corp.

Delaware Delaware

SECOND: That an Agreement and Plan of Merger between the parties to the merger has been approved, adopted, certified, executed and acknowledged by each of the constituent corporations in accordance with the requirements of subsection (c) of Section 251 of the General Corporation Law of the State of Delaware.

THIRD: That the name of the surviving corporation of the merger is Arterial Vascular Engineering, Inc., which upon the merger will change its name to "Medtronic AVE, Inc."

FOURTH: That the restated certificate of incorporation of the surviving corporation shall, as a result of the merger, be amended and restated in its entirety to read as set forth on Exhibit A hereto.

FIFTH: That the executed Agreement and Plan of Merger is on file at an office of the surviving corporation. The address of such office of the surviving corporation is 3576 Unocal Place, Santa Rosa, California 95403.

SIXTH: That a copy of the Agreement and Plan of Merger will be furnished by the surviving corporation, on request and without cost, to any stockholder of any constituent corporation.

ARTERIAL VASCULAR ENGINEERING, INC.

By:

Lawrence J. Fassica

Vice President of Legal Affairs, General Counsel and

Secretary.

2214498-3 (1bgp/4011.doc)

Exhibit A

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION OF ARTERIAL VASCULAR ENGINEERING, INC.

ARTICLE 1 - NAME

The name of the corporation shall be Medtronic AVE, Inc.

ARTICLE 2 - REGISTERED OFFICE AND AGENT

The registered office of the corporation in the State of Delaware is 1209 Orange Street, in the City of Wilmington, County of New Castle, Delaware, 19801. The name of its registered agent at such address is The Corporation Trust Company.

ARTICLE 3 - PURPOSES

The nature of the business or purposes to be conducted or promoted by the corporation is to engage in any lawful acts and activities for which corporations may be organized under the General Corporation Law of Delaware.

ARTICLE 4 - STOCK

The aggregate number of shares the corporation has authority to issue shall be 2,500 shares of Common Stock, \$.01 par value. Holders of Common Stock shall be entitled to one vote for each share of Common Stock held of record.

ARTICLE 5 - RIGHTS OF STOCKHOLDERS

- 5.1) No Preemptive Rights. No holder of shares of the corporation of any class now or hereafter authorized has any preferential or preemptive right to subscribe for, purchase or receive any shares of the corporation of any class now or hereafter authorized, or any options or warrants for such shares, which may at any time be issued, sold or offered for sale by the corporation.
- 5.2) No Cumulative Voting Rights. No holder of shares of the corporation of any class now or hereafter authorized shall be entitled to cumulative voting.

ARTICLE 6 - MEETINGS AND BOOKS

- 6.1) Meetings of Stockholders and Election of Directors. Meetings of stockholders may be held within or outside the State of Delaware, as the Bylaws may provide. Elections of directors need not be by written ballot unless and except to the extent that the Bylaws so provide.
- 6.2) Corporate Books. The books of the corporation may be kept within or (subject to any provision contained in the statutes) outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the corporation.

ARTICLE 7 - LIMITATION OF DIRECTOR LIABILITY

- 7.1) Limitation of Liability. A director of the corporation shall not be personally liable to the corporation or its stockholders for monetary damages for any breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware General Corporation Law, or (iv) for any transaction from which the director derived an improper personal benefit. If the Delaware General Corporation Law is amended after approval by the stockholders of this Article to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.
- 7.2) Amendment of this Article. Any repeal or modification of this Article 7 shall be prospective and shall not affect the rights under this Article 7 in effect at the time of the alleged occurrence of any act or omission to act giving rise to liability or indemnification.

ARTICLE 8 - BYLAWS

The Board of Directors is expressly authorized to make and alter Bylaws of this corporation, subject to the power of the stockholders to change or repeal such Bylaws and subject to any other limitations on such authority provided by the General Corporation Law of Delaware.

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